times fresh cuts) inflicted by rats which they kill by pressure from their body and mouth rather than constriction in the sense of tightening coils; frogs are swallowed alive.

On July 13 one 6½ feet dhaman laid 14 eggs; one spoiled and thirteen hatched on Sept. 16, 17; average length of young was 385 mm.

Most places in and around Bombay that have some extensive gardens or heavy growth provide food and shelter for the Indian rat snake; they are to be found on Cumballa and Malabar Hills and parts of Colaba in Bombay proper. From Worli and Dadar onwards they become increasingly common as unused property is more extensive.

There is little doubt that this rodent-destroying snake should be protected, especially now that there is a demand for their skins. It is a species that survives well in the vicinity of man (provided man does not destroy it), is innocuous and is probably a more efficient rat-catcher than any other creature.

C/o K. CHATTOPADHYAYA,
6, CHATEAU MARINE,
MARINE DRIVE,
BOMBAY,
January, 1969.

ROMULUS WHITAKER

13. FOOD AND FEEDING HABITS OF THE INDIAN SAND SKINK, *OPHIOMORUS TRIDACTYLUS* (BLYTH) BOULENGER

Ophiomorus tridactylus usually feeds in the evening, shifting its time of emergence according to the prevailing temperature. During summer it feeds late in the evening but in winter in the early hours just after sun-set. During rains and on windy days it does not emerge at all. Once at Barmer (1 Sept., 1967), I was able to collect 35 specimens between 8 and 10 p.m., but the next night at the same time with a strong, cool wind blowing, only 3 were caught.

Usually these skinks keep only their heads above the sand and stay motionless. Any moving prey coming near their mouth is snapped at. Ordinarily the prey is crushed by the jaws and battered on the ground before being swallowed. Observations on the mode of feeding were also made in semi-captive and captive conditions.

Semi-captivity: A dozen skinks of both sexes, were kept in an enclosure measuring 120×90 cm. which had a boundary wall to prevent their escape. This enclosure was built away from human

TABLE 1

PERCENTAGE VOLUME OF THE FOOD ITEMS FOUND IN THE STOMACH OF *Ophiomorus tridactylus* IN VARIOUS MONTHS OF THE YEAR, 1967

Food items (Insect orders) ..	Jan. (6)	Feb. (15)	March (15)	April (16)	May (16)	June (14)	July (14)	Aug. (15)	Sept. (18)	Oct. (17)	Nov. (8)	Dec. (6)
Isoptera ..	70	60	50	40	50	65	60	70	75	70	60	75
Lepidoptera ..	—	—	—	15	10	7	—	—	2	3	3	—
Orthoptera ..	—	—	10	15	8	3	5	2	4	2	5	—
Dictyoptera ..	—	—	—	—	7	5	—	—	4	—	4	—
Coleoptera ..	30	40	40	30	25	20	35	28	15	25	28	25

Note : Figures in parenthesis denote the number of stomachs examined.

habitation, so that the skinks were not unnecessarily disturbed. The enclosure was filled with loose sand made into the form of a small sand-dune and the skinks remained comfortably buried in the loose sand. Wooden pegs were also stuck in the sand, which were soon attacked by termites which provided ample food to the skinks.

Captivity: A dozen skinks were also kept in the laboratory in a glass terrarium, with a removable screen top, and with a deep layer of dry sand at the bottom for the skink to burrow in.

Different varieties of food were given to the skinks separately and together. Food was given in the morning at about 9 a.m. once every twenty-four hours. Each experiment was repeated four times and with fresh sets of skinks.

The skinks were never observed drinking though water was provided in semi-captivity and captivity. Food habits were studied by examining the stomach contents of freshly captured skinks and were analysed volumetrically. The volume of insects of one order has been expressed as the volume of the total stomach contents and the data have been pooled month-wise for a year (Table 1), from which, it is evident that the order Isoptera (termites) forms by far the majority of the lizards' food throughout the year. Coleoptera

TABLE 2

FOOD IN NATURE : ANALYSIS OF STOMACH CONTENTS

Month	No. of Stomachs	Food Items
January	6	a. Legs and heads with mouth parts of termites. b. Elytra and heads of beetles.
February	15	a. Legs and heads with mouth parts of termites. b. Elytra and heads with mouth parts of beetles. c. Entire termites.
March	15	a. Appendages, pieces of wings and heads of grasshoppers. b. Appendages and mouth parts with heads of termites. c. Entire small beetles. d. Elytra, body parts and heads of beetles.
April	16	a. Head of grasshopper. b. Appendages and heads of termites. c. Elytra and heads of beetles. d. Mouth parts of Lepidoptera.
May	16	a. Head of small cockroach. b. Appendages and heads of termites. c. Elytra and legs and heads of beetles. d. Head of *Gryllus.* e. Antennae of moth.

TABLE 2—(*contd.*)

Month	No. of Stomachs	Food Items
June	14	a. Entire beetle. b. Appendages and heads of termites. c. Wings, legs and head of a moth. d. Mouth parts of *Gryllus*. e. Legs of a grasshopper. f. Head and legs of cockroach.
July	14	a. Appendages and head with mouth parts of termites. b. Elytra and heads of beetles. c. Mouth parts of grasshopper. d. Wings and head pieces of some insects.
August	15	a. Elytra, heads and entire small beetles. b. Appendages and heads of termites. c. Entire termites without legs. d. Wings and head of grasshopper.
September	18	a. Elytra and heads of beetles. b. Appendages and heads of termites. c. Legs, wings, and heads of moths. d. Small cockroach crushed. e. Head and mouth parts of *Gryllus*. f. Crushed small grasshopper. g. Pieces of wings of some insects.
October	17	a. Appendages and heads of beetles. b. Appendages and heads of termites. c. Heads of grasshopper. d. Legs of insects. e. Heads of cockroach.
November	8	a. Appendages and mouth parts of beetles. b. Appendages and mouth parts of termites. c. Heads of moths. d. Appendages and heads of grasshopper. e. Heads of cockroach.
December	6	a. Appendages and mouth parts with heads of termites. b. Appendages and mouth parts with heads of beetles. c. Entire termites.

The skinks were collected every month throughout the year 1967 and their stomach contents were examined.
Details of food items, which could be identified from food contents are summarised in the table above.

(Beetles) comes next, the percentage volume of beetles vary from 15 to 40 per cent throughout the year. Lepidoptera and Orthoptera appear from March-April to November. Their inclusion in the skink food may be due to the lower availability of Isopteran and Coleopteran insects. The study of the stomach contents of *Ophiomorus tridactylus* shows that it is purely an insectivorous lizard.

Feeding trials on a wide variety of freshly killed insects and other edible materials, both animal and plant, were done with captive skinks and it was observed that Isopteran insects were preferred. No plant material was taken.

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January 20, 1969.

14. FISH FAUNA OF UDAIPUR LAKES

INTRODUCTION

The State of Rajasthan has great potentialities for the growth of Inland Fisheries. There are a large number of rivers, lakes, tanks and seasonal ponds. However, very little is known of the fish fauna of Rajasthan. Earlier publications of Mathur (1952), Krishna & Menon (1958) and Datta Gupta *et al* (1961) are not comprehensive. Hence, faunal studies of the fish population of the State were undertaken. The present paper forms a part of this study and deals with the fish fauna of Udaipur city popularly known as city of lakes.

MATERIALS AND METHODS

Weekly collections of fish were made throughout the year in 1965-66 from short stretches of water at various selected centres in Pichhola, Swaroop Sagar and Fateh Sagar Lakes. Every catch was sorted and fish obtained were preserved in 5% formalin. Morphometric observations along with the weights of different fishes were taken. Sex and stage of maturity were also recorded. Gill nets, cast nets, and sometimes drag nets were used for collections.

PHYSICAL FEATURES

Udaipur city (25°N. 75°E.), situated at 1983 ft. above sea-level, is surrounded by minor hills of the Aravalli ranges. To its south-east runs the Shisharma River which is formed by an assemblage of various streamlets from the adjoining hills. This silt-laden seasonal